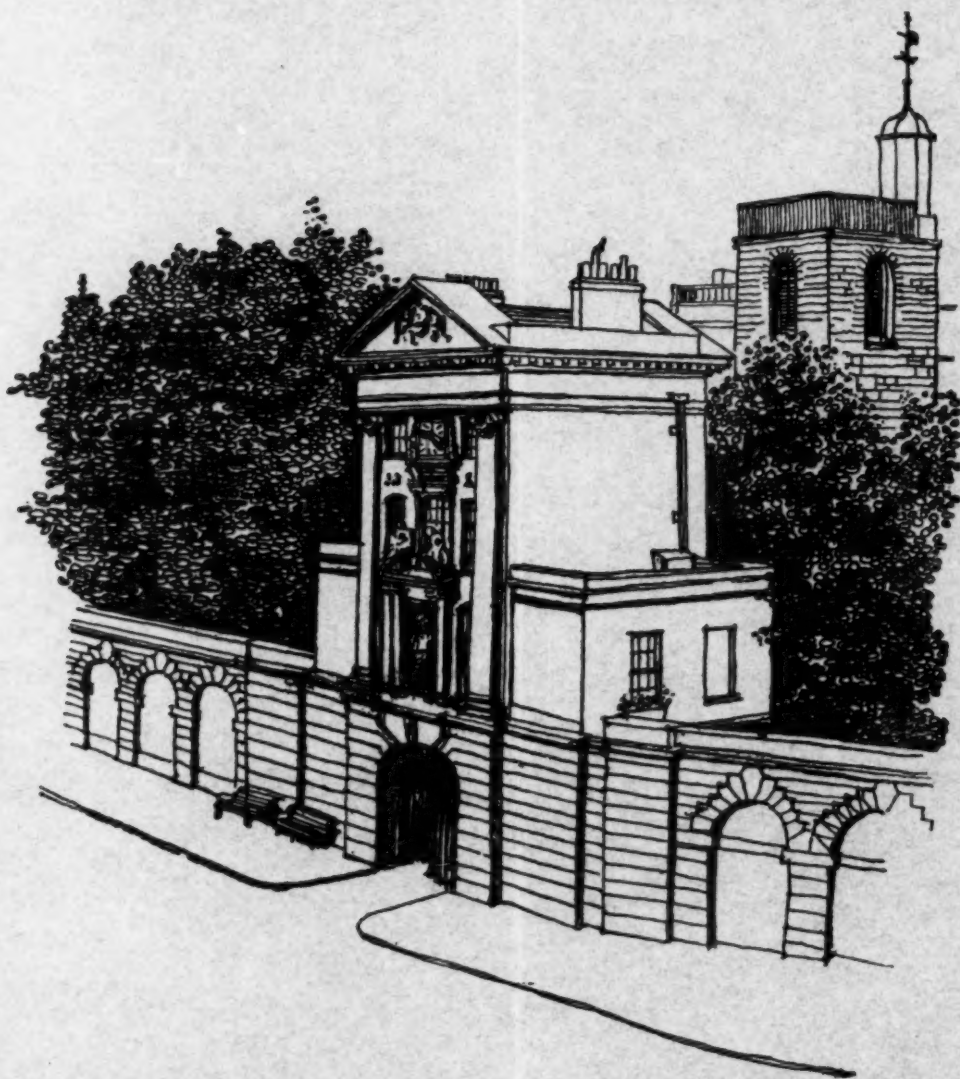


ST. BARTHOLOMEW'S HOSPITAL JOURNAL



VOL LXI

DECEMBER 1957

No 12

ST. BARTHOLOMEW'S HOSPITAL JOURNAL

Editor : J. K. CHONG.

Assistant Editor : M. J. L. PATTERSON.

Sports Editor : R. J. MITCHELL.

Charterhouse Representative : MISS A. M. MACDONALD.

Manager : M. I. D. CAWLEY.

Assistant Manager : J. CHAPMAN.

Women's Representative : MISS J. CHAMBERS.

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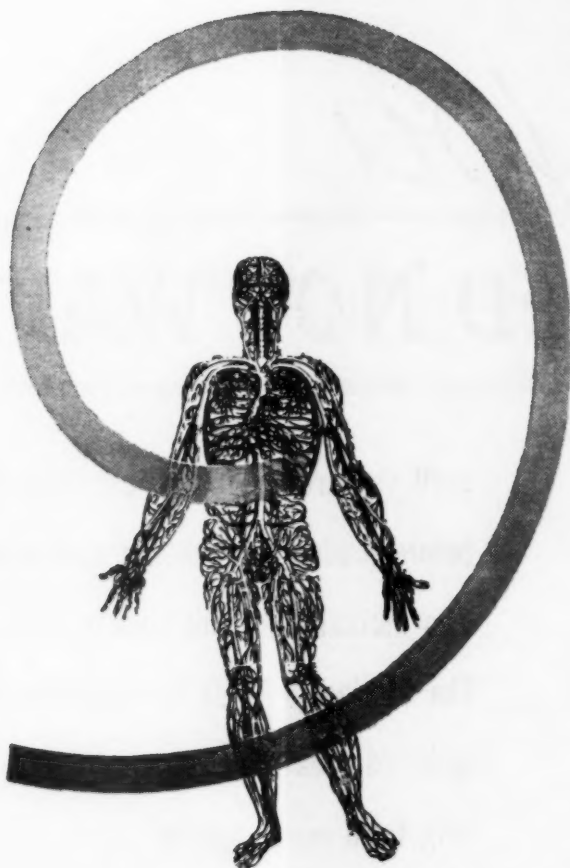
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4. Completed plaster — anterior aspect.



3. Surgeon completing the plastering of left leg and foot — anæsthetic discontinued.

5. Completed plaster — posterior aspect.



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ST. BARTHOLOMEW'S HOSPITAL JOURNAL

Vol. LXI

DECEMBER 1957

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EDITORIAL

ASSAILED BY the litigious, labelled by those with a penchant for frivolous pronouncements, the Profession which used to enjoy the acme of esteem and respect has been through painfully traumatizing times of late. The dignity of the person who has taken the Hippocratic oath has suffered repeated insults. Nurses in their careers of dedication and self-sacrifice have also been without impunity from onslaught. We feel that the pettiness and narrowness of outlook and thought in such assailants should be allowed to wallow on their base levels. Not seeking any eulogies and recriminations on behalf of the Profession, we would point out that the doctor and the nurse are very often the people from whom hope and eventual cure are sought by the maligner who has fallen ill. And often he forgets about the perils of receiving treatment from such dangerous hands. Even the most vituperative of television personalities has been known to be capable of gratitude after being lifted from the depths of all fleshly sufferings. Precipitated into similar circumstances of woe, even magisterial bodies should be similarly grateful, given the requisite fibres of human feeling.

To our readers in general practice who form the greater part of our subscribers, the publication by the *Journal* of "*A Casualty Department*" by R.H. in this issue would appear antithetical to our expressed interests in them. We would reassure them that even if this appeared so, it was unintentional and a consequence that could not be avoided. In the face of increasing numbers of cases of litigations (exact figures can be easily obtained by reference to the "most recent survey"),

one can do oneself little harm but bountiful good by practising self-evaluation or self-criticism. "Based on the slenderest of experience," the views of the writer of the article may not concur with those of many of our readers. On this highly controversial subject not without anathematical overtones we welcome the acumen of our readers.

As is fashionable in these days of sweeping ministerial powers and vital statistics, Committees have often been appointed by some servant of the State to enquire into the widest range of ills besetting us. In its "terms of reference," the Willink Report with its multitudinous figures and its "Findings on Supply of Doctors" has thought it compliant and propitious to advise a 10 per cent cut in medical school intake. To the layman with only a fleeting interest in what appears a minor aspect of his future well-being this curtailment may well form part of a general plan for economy and social standardization in the interests of the nation, significantly suggested at a time when reductions have been *de rigueur* in the armed forces and public services. "Highly speculative" as it was self-styled, the estimate of average annual requirements of doctors was made upon basically four reckonings—replacement of wastage by death and retirement, expansion, Armed Forces and "Export." As a result of the present age distribution of doctors, the Report also suggests that the intake may need to be increased again from about the year 1970 because the factor of wastage by death and retirement will have come into play more definitely. With the era of space travel ushered in by the Sputniks and "Little Lemon," the question of future supply of

doctors may well have to be drastically reviewed. In spite of push buttons and electronic brains to sort out vital data the final implementation of any definitive action, hostile or benevolent, must necessarily have human origins. Larger numbers of doctors may be required to delve into the physiological problems of space travel. An "Export Drive" of doctors trained in this country who have always had the reputation of quality and skill to other space-conscious countries coveting the best is not an impossibility. In such "terms of reference," one would urge the continued, if not the actual increased level of intake of medical students,

rather than recommend any "restrictive practices" or other similarly descriptive Trade-Unionisms which have crept into modern usage. The Arms Race has been superseded by the Technologists' Race.

Should the findings of the Committee be accepted and acted upon, the student who has just started on his course of training could have, for a modest sum, a "highly speculative" view of what the future holds for him upon application to the publishers of the Report. Together with his Christmas over-indulgence, this should provide indigestible food for thought.

Questionnaire

At the moment of going to Press, the Questionnaire on the aims and ambitions of Bart's students was nearing completion. It is the earnest hope of the *Journal* that in view of the hard and unselfish work which had gone into the compilation and completion of it—thanks being largely due to Messrs. E. A. J. Alment, G. R. Kinross Wright and J. S. Price—a 100 per cent. response from the Student Body will be forthcoming. It can not be over-emphasised that the personal nature of most of the questions must of necessity carry with it an absolute warranty of anonymity. The forms will be distributed to members of each "firm" by an appointed "stooge" and arrangements for complete secrecy have been made.

The questions have been phrased in a manner making for easy statistical analysis. Indeed, the final figures for a complete analysis will be computed by a commercial firm which specialises in statistical data. The *Journal* would ask that members of the Student Body gave up half an hour of their time for this serious enquiry.

The Feminine Touch

Having to work and study in a predominantly masculine atmosphere, the women medical students at Bart's must find life not infrequently exasperating. For them refuge

from things masculine could be found in their Cloakroom *at long last*. One of the daily newspapers which used to lie unread in their recondite haven (obviously written by males for the "peculiar mental processes" of males only) has been given up in favour of two women's weeklies. Fantasy, romance and paper love are to be had now after the shiny nose has been repaired. All those ladies bringing their own thermos flasks of coffee are kindly requested not to splash up the most exciting pages.

It has also been stated that apart from providing for feminine taste, the replacement of the mundane male daily by the two women's weeklies has also made the newspaper bill considerably cheaper.

* * *

Ward Shows and Pot-pourri

The Christmas Ward Shows will be staged again this year by the Students of the various batches and by the House on Christmas and Boxing Days. The "pick" of the shows will again be the basis of a Pot-pourri at the Cripplegate Theatre, on December 27, 28, 30. All those who had connections of any sort with Bart's are cordially invited to the Ward Shows, and those desirous of coming to the Pot-pourri should contact "Bert" Cambridge, c/o Williamson Laboratory, St. Bartholomew's Hospital, E.C.1, for tickets, which are at 3/-, 4/-, 6/- and 7/6.

Surgical Essay Prize

The Simpson Smith Surgical Essay Prize of 100 guineas for 1957 has been won by Mr. P. P. Rickham.

Society of Apothecaries

B. S. Mather has been granted the Diploma of the Society of Apothecaries in October, 1957.

NOTICES

Sports Editor

The post of Sports Editor is now vacant. Applications must reach the Editor by December 31.

* * *

Pot-Pourri

The times for the Pot-Pourri at the Cripplegate Theatre are 8.00 p.m. on Friday, December 27, 7.30 p.m. on Saturday, December 28, and 5.30 p.m. on Monday, December 30.

ANNOUNCEMENTS

Births

BANKS.—On October 7th, in Victoria, British Columbia, to Mary, wife of Dr. Peter J. Banks, a son (Nicholas John).

BAPTY.—On October 25th, in the Belgian Congo, to Barbara, wife of Dr. Allan Bapty a daughter (Helen Frances).

CAVE.—On June 24th to Pat and David Cave, a daughter (Alison Mary), sister for Peter.

HUNTSMAN.—On October 18th, at Bart's, to Elaine, wife of Dr. Richard G. Huntsman, a daughter (Jennifer Clare).

KINSMAN.—On October 23rd, to Margaret, wife of Dr. F. M. Kinsman.

LUCAS.—On October 15th, to Fionnghuala, wife of Dr. Peter Lucas, a son.

ROBINS.—On November 23, at Exeter, to Shirley and Robert Robins a son (Michael George), brother for Elizabeth.

Deaths

BODEN.—On October 18th, Geoffrey Walter Boden, aged 51. Qual. 1937.

COLT.—On October 26th, George Herbert Colt, aged 79. Qual. 1904.

HANCOCK.—On October 25th, Frank Thompson Hancock, aged 76. Qual. 1908.

CALENDAR

Sat. Dec. 14	Dr. A. W. Spence and Mr. C. Naunton Morgan on duty. Anaesthetist: Mr. R. A. Bowen. Hockey: v. Westminster Bank (H). Soccer: v. Westminster Hospital Sports and Social Club (A). Rugger: v. Saracens (H).
Sat. „ 21	Dr. R. Bodley Scott and Mr. R. S. Corbett on duty. Anaesthetist: Mr. R. W. Ballantine. Rugger: v. K.C.S. Old Boys (H).
Sat. „ 28	Dr. E. R. Cullinan and Mr. J. P. Hosford on duty. Anaesthetist: Mr. C. E. Langton Hewer. Rugger: v. Stroud (H).
Sat. Jan. 4	Medical and Surgical Professorial Units on duty. Anaesthetist: Mr. G. H. Ellis. Hockey: v. London Hospital (A). Soccer: v. Old Chalmersians (H). Rugger: v. Old Rutlishians (A).
Sat. „ 11	Dr. G. Bourne and Mr. J. B. Hume on duty. Anaesthetist: Mr. F. T. Evans. Hockey: v. National Provincial Bank (H). Soccer: v. Old Chigwellians (H). Rugger: v. Taunton (A).
Wed. „ 15	Soccer: v. Charing Cross and Royal Dental Hospital 'A' XI (A). Rugger: v. London University.
Sat. „ 18	Dr. A. W. Spence and Mr. C. Naunton Morgan on duty. Anaesthetist: Mr. R. A. Bowen. Hockey: v. Blueharts (H). Soccer: v. St. Thomas's Hospital (A). Rugger: v. Cheltenham (H).
Fri. „ 24	Soccer: v. Trinity College, Oxford (A).
Sat. „ 25	Dr. R. Bodley Scott and Mr. R. S. Corbett on duty. Anaesthetist: Mr. R. W. Ballantine. Hockey: v. Goldsmiths' College (H). Rugger: v. Oxford Greyhounds (A).
Wed. „ 29	Soccer: v. Guy's Hospital L (A).

The *Journal* sends the Season's greetings to its readers.

LETTERS TO THE EDITOR

"LONG" WEST

Sir,—I have only just read Dr. F. Parkes Weber's article in your July number.

I believe the dresser "Long" West is the same Dr. West who practised in Leicester until the Great War. He was a Bart's man, a very racy character and my mother's doctor.

She told me that he had been taken as the model for Sherlock Holmes by S.P. in his illustrations for the Strand Magazine. I wonder if Dr. Parkes Weber can see a likeness.

Dr. Watson is, of course, the most famous of Bart's men, and he first met Holmes in the pathological laboratories of the hospital. I hope a further connection with the hospital may now be established.

To end on a clinical and personal note, I can reveal that my mother had such a post partum haemorrhage after the birth of my elder brother that she lost her sight for three days. Even Dr. West was shaken, and he solemnly warned her not to have any more babies. So if Dr. West was the original for Sherlock Holmes I would apply for honorary membership of the Baker Street Irregulars.

Yours sincerely,

RUSSELL E. FREARS.

14, Park Terrace.
The Park, Nottingham.

PARSLEY FOR PROSTATE — 1

Sir,—David S. Wright's letter and recipe of parsley for the prostate prompts the question as to whether parsley is indeed good treatment for the prostate.

According to Mrs. C. F. Level in "Herbal Delights," the old name for the herb in question are Parsley Breakstone and Parsley Piercestone (and in other tongues, Perce-pierre, Steinbrech and Spaccapietra) which suggest, and this is borne out by ancient practice, that it was a remedy for dissolving stones, and not for bringing about atrophy of the prostate gland.

The herb can be taken as an infusion in sherry, pickled and eaten with cold meats, or more commonly in salads.

Yours sincerely,

R. G. DANIELS.

Royal Devon and Exeter Hospital,
Exeter, Devon.

PARSLEY FOR PROSTATE — 2

Sir,—The pharmacology of parsley was not included in my course. Perhaps some of the benefits claimed for it in the treatment of prostatism may be due to the associated advice to "drink plenty of milk and barley water," since the water contained in both would help to dilute less desirable fluids circulating in the blood-stream, which might induce prostatic congestion and so aggravate symptoms. The water might also help to relieve another prostatic congestant constipation.

With regard to which stimulants to avoid, Sir Girling Ball used to say "There are three things which a man with an enlarged prostate should avoid—alcohol, horse-riding, and the Empire Revue"! The Empire Revue is no more, but perhaps its film successors act as adequate locums!

With such care in régime, so many prolonged periods of remission of symptoms characteristically occur with a prostate which may all the time be slowly enlarging, that the employment of any positive agent may get the credit really due in part, if not largely, to the avoidance of the noxious agents above mentioned.

Yours sincerely,

ALEX. E. ROCHE.

71, Harley Street, W.1.

SOUTH AFRICAN TOUR — 1

Sir,—It is unfortunate that Dr. Donaldson did not take closer heed of the moral of the anecdote concerning the Pope and his American visitor recounted in his article on a South African tour published in the *Journal* of August, 1957. Had he done so, he would have spared his more informed readers and his South African hosts considerable embarrassment. Not often has so much inaccuracy, half-truths, misinterpretations and plain nonsense appeared in so few pages, and it cannot pass unanswered.

Dr. Donaldson's suggestion that the Witwatersrand University Medical School at Johannesburg (easily identifiable from the text) might be separated from the University, is made without the slightest justification. No one in South Africa has ever contemplated such a step, and one cannot imagine the source of the idea.

After all the blaze of publicity in the Scientific Journals which the great incidence of primary carcinoma of the liver in the Bantu has received for

years, it is almost with a sense of unreality that one notes the omission of all reference to it. Oesophageal carcinoma may be very common in some areas of the country, and in an older age group, but over most of South Africa—or even Africa south of the Sahara—primary liver carcinoma dominates the picture in males and carcinoma of the cervix in females. It is also incorrect to suggest that lung cancer is less common than cancer of the upper air sinuses.

The story of a research worker arranging bicycle accidents in order to obtain samples of "native drink" would be laughable were it not such a reflection on one's colleagues and their research methods. It would have been more reasonable had he suggested that he was thirsty! Had Dr. Donaldson inquired, he would have learnt that the usual cause of oral anaesthesia produced by some brews is the addition of a little carbide which, presumably, appeals to the more sophisticated tastes of the urban Bantu.

One would have preferred to agree with the observation that our laws concerning quacks were more stringent than in the United Kingdom. There is *no law* to prevent a quack, or any unqualified person, from charging for his activities. He breaks the law—and, I imagine it is precisely the same in England—only if he holds himself out to be a registered medical practitioner.

Not content with the foregoing, however, Dr. Donaldson then permits himself, with all the experience and observation gained in his few weeks' travels, to indulge in a political discussion based on even more slender knowledge of the facts than was betrayed in his analysis of the cancer situation.

Little would be gained by a detailed analysis of all the statements made, but one cannot let pass the mischievous suggestion that the establishment of the Medical School at Stellenbosch University has as its aim the elimination of the great School at Cape Town. Not even the most bigoted critic of our present Government would put forward such an idea. His interpretation of the Government's policy towards the various coloured peoples of South Africa betrays only his utter ignorance of what is intended.

Perhaps the worst statement of all is that the Medical Association of South Africa did not permit a native doctor to attend his lectures to the profession in Johannesburg because of his colour. Writing on this point only as the Hon. Secretary of this branch of the Association, I can assure the *Journal* that no lecture or scientific meeting is closed to any colleague on the grounds of race, creed or colour, and Dr. Donaldson's suggestion to the contrary is as insulting to the Medical Association of South Africa as it is untrue. He might as well argue that because no Esquimaux were present at his meetings, the Medical Association banned the Esquimaux; and his allegation that a native was not allowed to work in the "clinic" of his Location is equally at variance with the facts. The Johannesburg City Council, which maintains these very good clinics, has advertised for years for native doctors to staff them, but has never received a single application. In the circumstances the Council can scarcely be blamed for staffing them with "white doctors" as its first duty is to provide a service.

Your correspondent is a staunch opponent of the

present Government, but the cause of opposition is not served by the publication of inaccurate and misinformed statements such as these. It produces widespread mischief, and results in embarrassment and difficulty for the fair minded, and places them in a situation where they are compelled, as honest and loyal citizens, to defend a Government many of whose policies and actions to them are anathema. The dissemination of nonsense such as we have seen in this report reflects on every South African, whatever his politics, just as does his smug reference to the effects of Father Huddleston's book. There were consciences here, and very lively ones too, long before Father Huddleston entered our midst.

One feels that political articles have no place in our *Journal*, and one hopes that Dr. Donaldson has set no precedent.

Yours sincerely,

JONATHAN GLUCKMAN.

1206 Medical Centre, Jeppe Street,
Johannesburg, South Africa.

SOUTH AFRICAN TOUR — 2

Sir,—I regret that Dr. Gluckman should have taken exception to my short report in your August, 1957, issue concerning my most enjoyable visit to South Africa. I do not think that my personal views can have caused any embarrassment to my kind hosts (who were not the South African Medical Society) because I stated quite clearly in my article that their organisation had nothing to do with politics and that "my own interest was purely a side line that had nothing to do with my hosts."

The first part of my report dealt very briefly with some of the various types of cancer I saw, but it did not pretend to be an exhaustive treatise on all cancer among the Bantus. Nevertheless, Dr. Gluckman accuses me of mis-statements and omissions. I am fully aware, as indeed are all doctors interested in cancer, of the prevalence of primary carcinoma of the liver in Bantus compared to that occurring among the white population. He denies that carcinoma of the oesophagus is more common among the Bantus than among the "Europeans." My impression was gained after meeting Dr. Burrell, and reading his article (*South African Medical Journal*, 31, April 27, 1957, pp. 401-409), in which it is stated that this type of malignant disease occurred in 72.3 per 100,000 among the Bantus, and only 10.8 among the "Europeans." My evidence about the question of greater frequency of malignant disease in the upper air passages among the Bantus compared with that among the Whites, and the reverse in cases of cancer of the lung, was obtained from an article by P. Keen, N. G. De Moor, M. P. Shapiro and L. Cohen of the non-European Hospital and Radiotherapy department of the Johannesburg General Hospital, which was published in the *British Journal of Cancer*, IX, p. 529, where the following figures appear concerning a series

of cases of malignant disease in the air passages—Malignant disease of nose and upper air sinuses, in Bantus 54 per cent., in "Europeans" 5 per cent.; Malignant disease of lung, in Bantus 17 per cent., in "Europeans" 67 per cent. I suggest that your correspondent really should read the cancer literature written by members of his own country before he criticises my statements. I admit that the story of the research worker who obtained "Native drink" in an unorthodox way was purely hearsay "tittle-tattle," but if the incident ever did occur I consider it was quite justified and very amusing. I did not intend to bring it up as a political racial issue.

I am sorry that I was misinformed about the laws concerning cancer "quacks," but I had hoped that South Africa was in advance of us in this respect.

Turning now to the second half of my article, I fear Dr. Gluckman did not appreciate the reason for telling the story about the Pope. I did NOT state that a native doctor was prevented by the South African Medical Society from attending my lectures; the doctor told me that he was not

allowed to come to my lectures although very anxious to do so, but he did not state what authority prevented him. For the same reason he was not allowed to enter my hotel and take a glass of sherry with me. Of course, it may all have been an excuse because he did not wish to mix with "White" people. I know nothing about the Clinics in Johannesburg, the incident I relate took place in another town. I would remind Dr. Gluckman what happened when a B.M.A. annual meeting was suggested to take place in South Africa some years ago.

Finally, I am delighted to hear that Dr. Gluckman and his friends had "very lively" consciences about the evils of Apartheid before Father Hudedson arrived in South Africa.

Yours sincerely,

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THE CONTINUOUS SUMMER *

by A. J. MARSHALL, D.Phil., D.Sc.

THE BREEDING seasons of temperate zone birds and other animals can be modulated to some extent by daylength fluctuations — increasing daylength in most, by decreasing light in others. By being somehow able to gauge daylength fluctuation of a magnitude too small to be appreciated by us, these temperate zone animals are able to start off their breeding processes ultimately to produce their young at the time of year at which reproduction is likely to be most successful, i.e., that the young in turn will survive and reproduce themselves.

But how do animals living on the equator — where there is a light-swing of only about two minutes a year — “time” their breeding seasons? That is, if they *do* have breeding seasons. Opinions have been divided on this point. For generations travellers’ tales had made out that equatorial birds — as apart from those animals that lived in the tropics somewhat above and below the equator — “bred all the year round.” In 1933-34, an Oxford expedition led by Baker (of which I was a very junior member) spent a whole year in Espiritu Santo, a Western Pacific island, to study the problem. It was found that, notwithstanding the remarkable equability of the climate there, the majority of the animals studied had breeding seasons as sharp as those of creatures living, say, in Sussex. But Santo is no less than 15 degrees off the equator — there is a light difference of well over an hour between the summer and winter (so to speak, because there is, of course, no winter) solstices. So that, really, the sharp breeding seasons of Santo might be explicable in terms of daylength changes — if the animals there had been able to evolve a mechanism sufficiently sensitive to appreciate them.

During the past two years I have twice gone out to equatorial Africa to study the same problem — but this time dead on the equator, where there is a light-swing of only about two minutes per year. It would be asking a lot of any animal to have evolved a response to a photo-fluctuation as small as

that. Therefore, if animals at Jinja (in Uganda) and at Nanyuki (in Kenya) had sharp breeding seasons, well, it was a safe bet that they were timed by factors other than photoperiodicity.

The first question: Do animals living precisely on the equator have sharp breeding seasons — like, for example, a robin or a toad in Hampshire? The answer is: Some do, and some do not. Let us take for our first examples some birds, a bat and fishes inhabiting the “top” end of Lake Victoria.

Around the shores of Lake Victoria flying insects are heavily abundant throughout the year. Obviously the bats have a never-failing supply of suitable food. The roofs of the European and Indian dwellings provide the bats with a far greater breeding space than the hollow trees and odd caverns they had to occupy before European settlement. In Uganda it is never unpleasantly dry, and never cold. This superabundance of food, and the absence of external inhibitors like cold and so on, allows them to reproduce all the year round — just like man. There is no breeding season.

This bat was the only mammal easily got in large numbers in Jinja, but there were fish and lake-birds in plenty. What would they tell us? The birds chosen were all voracious fish-eaters — birds that bred only on tiny-wooded islets remotely down the Victoria Nyanza. There were two cormorants. One was the big pied fellow, and the other was a little black one with red eyes. The first fished the open waters, the second patrolled the reed-beds. The third bird was the spike-beaked, snake-necked Darter. We were tremendously helped by the extraordinary nesting conservatism of these birds. The whole vast North-western population of cormorants and darters nested only on four small islets. With such a small number of suitably tiny breeding isles, one would think that each pair of cormorants would be able to breed only once every several years — or that each nest site on islands would be used by several pairs in succession. Rather, in fact, as though a succession of pairs of swallows had to occupy a single eave throughout the English summer.

* Originally the second of two talks on Breeding Seasons on the B.B.C. Third Programme.

And this is just what happens. Each suitable islet is black with birds—sitting on their clumsy, dirty stick-nests with hundreds of pale green eggs and fluffy, ugly black young. And on rocky and woody promontories of the bigger islands nearby sat colonies, in an inactive phase as far as reproduction was concerned. As the young of one community flew, the adults of another would take over the empty section of the ambatch trees. Then they, too, would lay and hatch out their young. Meanwhile another segment of the colony would move out, and another would move in. A sort of Cox and Box arrangement prevailed—the islets seemed always to be used—but by different groups of breeding birds. It seemed that, like the bats, the lake birds (with a never-failing source of fish food) also bred all the year round. Then late in January, a most peculiar thing happened. The birds stopped breeding. They still used the islets as a roost—but never laid a single egg. The green foliage came back to the battered ambatch trees. Checks showed that there was no breeding on the lake-shores or on the larger isles. What was the explanation? Could it be that every pair in the north-western corner of the lake had exhausted its breeding potential? That did not make sense. Could they—on each island—have been scared by something? That made nonsense, too. Then, quite suddenly, after a three-months' break, each island was again covered with nests, and for the rest of the year thousands of baby cormorants, darters (and a good many egrets) continued to be hatched.

The break made it absolutely necessary to keep the observations going for another year—so through 1955, 1956 and 1957 records of breeding activity were duly kept by a collaborator. This year precisely the same thing happened again. In January—the islets were black with nesting birds. In March and April—the islands were deserted except for a few roosting individuals. We think it possible—but we have not proved—that the cormorants have evolved a response that prevents them from breeding during the brief stormy period of the year during which their flimsy nests and young are most likely to be blown into the lake.

Fishes should not be troubled by storms nor, on the equator, by seasonal shortages of food. If equatorial bats can reproduce throughout the year, one might perhaps expect the same of fishes. And that is true of

some of them—*Tilapia* and *Haplochromis* of various species, for example. But there is another group of equatorial fishes that are more rigidly seasonal than any vertebrate here in England. These are the fishes that can only breed when it rains. This may sound incredible, and so I had better explain by specific reference to one of them—the specialised catfish *Clarias*.

Clarias can breed twice a year, but only under special conditions. These conditions are rainfall of a volume sufficient to flood heavily the streams that flow into the lake. If there is a sufficient head of water—but not unless—thousands of male and female *Clarias* fight their way against it, ascend the streams (dry, perhaps, a few days before) to the flooded areas beyond the papyrus swamps. Here the females lay. The parents now go back to the lake, leaving their eggs to hatch. Before the streams dry up the young are of a sufficient size to make their own journey towards deeper waters. Why, one might ask, do *Clarias* wait for dry streams to be flooded when they could apparently do as *Tilapia* does, i.e., breed all the year round down in the lake? Well, Greenwood and I think that they do so because they come originally from a stock that inhabited swift-running freshwater streams—that they are just retaining an age-old custom. Right through the animal kingdom we see how once Nature gets hold of a good thing, she tends to stick to it. And she can afford to in the case of *Clarias*. If the rains fail in November, they most assuredly will not fail in March. The lake-side streams will certainly fill at least once a year. Why, then, should the species change from its efficient mode of reproduction just because it is now lake-locked?

I was able to work also at Nanyuki on the slopes of Mount Kenya in an entirely different sort of country. I was still hugging the equator in order to avoid the influence of light fluctuations—but up there, at 7,000 feet, there was a much greater seasonal change in several ways. I couldn't use fish up there. The open veldt was studded with granite outcrops that swarmed with brilliant red and blue *Agama* lizards.

Like the bats near Lake Victoria, the *Agama* lizards out on the veldt bred all the year round. However, with the peak of rainfall the reproduction rate stepped up and a remarkable adaptation to rapid breeding was found in the females. After the rains came, and the warm brown plains were covered

with grass and insects, females would have shelled eggs in their oviducts, another cargo of yolked but as yet unfertilized eggs near the surface of their ovaries, and a third generation of very minute eggs beneath — all waiting to develop. So that, although we found some females pregnant during every month of the year, they retained also a device that would enable them rapidly to populate the good earth with young Agamas every time rain happened to fall. One supposed that, in the drier areas up to the north in Somaliland, these reptiles could breed only when the rain fell—and there particularly, this adaptation for quick reproduction would be very handy, so to speak, to the species.

So much then, for the equator. Some animals are able to reproduce all the year round —those that find the environment sufficiently fruitful to enable them to do so. Others do not; and can breed only after the rains produce conditions propitious for their special modes of reproduction, and for the survival of their young. The animals that had a breeding season can not "time" it by means of photoperiodicity—as can an English robin or rook. On the equator, as I said before, there is a difference of only about two minutes between the longest and shortest days.

What factor is the regulator in such equatorial animals? People often say simply "rainfall." But is it rainfall? It might be the sudden, perhaps stimulating appearance of green grass that grows so quickly after the rains come. Or, perhaps, the almost equally sudden appearance of the masses of proteinous insect food that most birds need to provide amino-acids essential to the health and growth of their young.

I had wanted to attack this problem experimentally ever since I was an undergraduate, and the chance to do so came in Tanganyika with a friend, John Disney, who is an officer of the Department of Agriculture there. At Dodoma, about 6 degrees off the equator, the country is dry and drought-stricken for about eight months of the year, and Disney built four big cages into each of which he put about 200 Diochs. Now the Dioch—its generic name is *Quelea* — is a small, vivid weaver-finch and, although it weighs only about half-an-ounce, it is a major pest in the drier areas of Africa. The reason is simple: it occurs in vast flocks, each sometimes literally more than a million in number. It ranges widely over the country, ravaging the African's crops. Sometimes it has been respon-

sible for bad famines, because flocks of this tiny bird are sometimes so big as to darken the sky and to be mistaken for flocks of locusts.

Disney varied our cages as follows: in Cage 1 he left the surroundings pretty bare —just some water in troughs, dry seeds and leafless thorn-bushes—to more or less equal the dry surrounding countryside. Cage 2 he left bare also—but, fixed above the roof was a garden sprinkler that simulated the wet season for two hours a day during the dry season. Cage 3 was furnished with trays full of freshly-grown green grass and plenty of the long green grass used by the Dioch for nest-building. (It took an awful lot of organisation keeping a special plantation of this stuff growing during the dry season.) Cage 3, then, had in it conditions rather like those that always follow rain. But it had no sprinkler for rainfall, so to speak, and it had no insects. Cage 4 had a sprinkler producing two hours of rainfall every day, and in addition it had grass and lots of proteinous food—termites, fly larvae and the like. (These, too, took a great deal of collection and breeding in the dry season.)

There was plenty of evidence of an internal rhythm of reproduction in this weaver finch. Gradually the birds of all four cages started to come into breeding plumage. But only in the birds of Cage 3 did successful and repeated reproduction occur. That is, the one without rainfall, without proteinous insect food—but with masses of long green grass of the sort which grew *after* the rains came and which it actually always uses for nest building. There was evidence, in fact, that rainfall tended to inhibit reproduction.

After the eggs hatched we put insect larvae and termites into Cage 3 so that the young could be reared. It was a piece of luck for us that during the year of experiment the natural rains failed near Dodoma, and the only Diochs to breed in that wide area were those that were hatched under experimental conditions in our Cage 3.

Ecclesiastes said: "To everything there is a season." To which the mid-20th century biologist can reply: "Not quite everything; and especially near the equator."

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FROM TRADE GUILD TO ROYAL COLLEGE*

by SIR JAMES PATERSON ROSS, K.C.V.O., LL.D., M.S., P.R.C.S., F.R.A.C.S., F.A.C.S.

IF YOU look carefully at the inscription on the front of the Royal College of Surgeons of England—ÆDES COLLEGII CHIRURGURUM ANGLICI DIPLOMATE REGIO CORPORATI, A.D. MDCCC. — you will notice that the word "ANGLICI" differs slightly from the others. Formerly the word had been "LONDINIENSIS" and the present appearance of the inscription provides visible evidence of the change in the title of the College which occurred in 1843. "The Royal College of Surgeons of London" was established by a Royal Charter granted by George III in 1800, and it may be assumed that this is as far back as one needs to go to understand the origin of the College. This, however, is a near-sighted view, and we must delve deeply into the history of the City of London if we are to obtain a true picture of the ancestry of the College, and of the events and developments extending over several centuries which led to the establishment of the College on its present site.

Accurate details of the history of London in the Middle Ages are not easily obtained, but it is clear that in the 13th and 14th centuries there was a steady growth in the size and influence of a "middle-class" of craftsmen who formed craft or trade guilds which were the predecessors of the City Companies. The guilds were started to regularise the practice of the particular calling; to lay down rules for the appointment, training and discipline of apprentices; to safeguard the rights and privileges of members; and to perform certain religious duties. They obtained the right of using a particular livery.

Such a guild or confraternity of surgeons was formed by the military surgeons who served in the 100 Years War (1337-1444), but the earliest known charter concerning surgeons is that granted to the Barbers' Company by Edward IV in the year 1462. No doubt the Guild of Surgeons had little or no authority in the City because of its small membership—the records show that in 1491

there were eight, and in 1513 only twelve members—yet it is strange that the Barbers' Charter should deal almost exclusively with surgery, as though this craft were entirely in the hands of the Barbers. The charter states that the free men of the Mystery of Barbers (mystery is the same word as the French *métier*) had for long exercised "the Mystery or Art of Surgery, as well respecting wounds, bruises, hurts, and other infirmities of our liegemen, and healing and curing the same, as in letting blood, and drawing the teeth of our liegemen." It further stated that through the ignorance, negligence and stupidity of the unskilled "very many and almost infinite evils" had befallen our liegemen; and so the Charter was granted for the purpose of remedying these evils, and charged the Company with the superintendence, scrutiny, correction and government of freemen of the City being Surgeons and exercising the Mystery of Barbers, and of all other foreign Surgeons practising in the City of London and its suburbs.

It may be asked how it ever came about that the practice of surgery was in the hands of the barbers. In the middle ages the clergy were the physicians, but as time went by the priests began to feel the competition of Jewish physicians and lay surgeons. The Jews were thwarted by their patients being excommunicated; but all the Church could do to the lay surgeons was to brand surgery as an inferior and derogatory calling, and to forbid priests to undertake any operation which involved the shedding of blood. Rather than allow the control of surgery to slip from them the priests selected their servants the barbers, who were known to be dexterous with sharp instruments, not only to shave their tonsures but also to be taught the surgical art under their direction. These pupils of the priests became Barber-Surgeons.

It has already been pointed out that the Surgeons, though men of a better class and with attainments of a much higher order than the barber-surgeons, were too few to gain any authority in the City, so they attempted to establish themselves by union with the Physicians. A conjoint College of Physicians and

* The Inaugural Address delivered to the Abernethian Society on October 3, 1957.

Surgeons was formed in the City under the authority of the Mayor, but this arrangement proved unsatisfactory because the physicians, most of whom held University degrees, looked down upon the surgeons who were less well educated, yet were constantly striving to raise the standard of their craft and to inculcate high ideals in regard to responsibility towards their patients. As an example of this one may quote the regulations made about the middle of the 15th century, whereby four members of the Guild were elected Masters, whose duty it was to supervise the craft, to inspect apprentices, to punish malpraxis, and to be available for consultation in cases of serious illness—in fact it was an offence for a surgeon to fail to call in the Master under such circumstances.

The Conjoint College did not last long, but the surgeons were unable to exist alone and therefore agreed to combine with the Barbers. A charter was granted by Henry VIII in 1540 to the Surgeons and Barber Surgeons, but it must be understood that the combined company consisted of Barbers, Barbers practising Surgery, and Surgeons. The Charter gave the Surgeons control over the Barbers practising Surgery, and by the rules of the Company surgeons were not allowed to practise shaving, and barber-surgeons were not allowed to do more than draw teeth. If any of the barbers became surgeons it was only after some years of apprenticeship, attendance at lectures and demonstrations, and obtaining the Bishop's licence.

We see in the establishment of these Guilds and Companies a sense of high responsibility and a desire to set up good standards of service to the public or, as in this case, to patients. This is borne out not only from the study of the rules and records of the Companies, but also from the writings of their prominent members. To read these records of the thoughts and ideals of men of a by-gone age helps to keep us humble; so often we may be inclined to think that because they knew less than we do, and their methods were more crude, that they must have been not only ignorant but brutish. In fact, we have not out-grown their faults, and we cannot improve upon their noble ideals; it was their fine character that has made their names survive.

The first Master of the Company of Barber Surgeons was Thomas Vicary, Sergeant Surgeon to King Henry VIII and a Governor of

St. Bartholomew's Hospital. It is sometimes stated that he was Surgeon to the Hospital, but although he played an outstanding part in the life of the Hospital for many years, and may have exercised supervision over the duties of the surgeons, as over much of the rest of the work of the Hospital, he was not appointed one of the four Surgeons to the Hospital at the time of its second foundation. Vicary wrote "*A Profitable Treatise of the Anatomie of Man's Body*," a book which had little merit as far as anatomy was concerned, since it was merely a translation of an ancient text, but is most valuable as an indication of what Vicary regarded as the attributes required in a man who would be a surgeon. "Four things most specially that every surgeon ought to have—

"The first, he ought to be learned and that he know his principles, not only in Chirurgie, but also in Phisicke, that he may the better defende his Surgery; Also he ought to be seene in natural Philosophie, and in Grammer, that he speake congruitie in Logike, that teacheth him to prove his proportions with good reason. In Rethorike, that teacheth him to speak seemely and eloquently; also in Theorike, that teacheth him to know things naturall, and not naturall, and things agaynst Nature. Also he must know the Anatomie, for al Authors write against those Surgions that worke in mans body not knowing the Anatomie, for they be likened to a blind man that cutteth in a vine tree, for he taketh more or lesse than he ought to doo. . . . it is as possible for a Surgion (not knowing the Anatomie) to work in man's body without error, as it is for a blind man to carve an image and make it perfyte.

"The second, he must be expert . . . he oughte to knowe and to see other men work and after to have use and exercise.

"The thirde, that he be ingenious or witty; for al things belonging to chirurgerie may not be written nor with letters set forth.

"The fourth, that he must be wel manered, and that he have al these good conditions here following—that a Chirurgieon must take heed to deceiue no man, with his vayne promises, nor to make of a smal matter a great, because he woulde be accounted the more famous . . . Likewise they shal give no counsayle except they be asked, and then say their advise by good deliberation, and that they be wel advised afore they speake, chefly in the presence of wise men. Likewise they

must be as privie and as secrete as any Confessor of al thingis that they shal eyther heare or see in the house of their pacient . . . And see they never prayse them selves for that redoundeth more to their shame and discredite than to their fame and worship; For a Cunning and skilfull Chirurgion neede never vaunt of his doings, for his works wyll ever get credite ynough. Likewise that they despise no other Chirurgion without a great cause: for it is mete that one Chirurgion should love another, as Christe loveth us al."

We begin now to understand what we mean when we say that the Royal College of Surgeons has inherited a great tradition, and why it is that we trace our origin back to the old Guilds.

Though the association with the Barbers gave the Surgeons more power in the City, it was otherwise to their disadvantage, especially in their relations with the Physicians, who regarded it as a sign of their inferiority and forbade surgeons to prescribe for their patients. Not till Abernethy's time did surgeons obtain this right. In spite of the special privileges which the Barbers allowed to their surgical brethren—for example, at meetings of the Court of the Company, after the general business was over the Barbers would withdraw and leave the Surgeons to discuss their own professional affairs in private—the union was on the whole an unhappy one and was dissolved in 1745, when the Surgeons were incorporated as a separate Company with their own Surgeons' Hall in Old Bailey. Here lectures were given in Anatomy and Surgery by Percivall Pott and later by his former pupil John Hunter, but as the century neared its close the affairs of the Company went from bad to worse. It was difficult to find lecturers and to obtain audiences for them; interest was lacking in the general well-being of the Company; and there were even complaints about the conduct of the examination of the Surgeon's mates for the Navy.

It is important to note the association of the Company with the Navy, for the Court not only examined candidates for the medical service but also acted as a tribunal to assess the claims made by Naval officers for compensation or pensions for wounds and "hurts." Among the treasures at the College of Surgeons there is the record of a claim made by Admiral Sir Horatio Nelson for his surgical treatment when he lost his arm. The

anchor on the College Coat of Arms bears witness to this link with the Royal Navy.

It seems strange that interest in Surgery should have flagged at a time when John Hunter was so busily introducing the method of experiment into the study of surgery and placing the subject on a sure scientific foundation. It seems clear that although a few men like Astley Cooper appreciated his leadership the majority heedlessly continued to follow the old-fashioned empirical practices, and the teaching of surgery at Surgeon's Hall languished and finally died when the Company was dissolved in 1795. Within five years, however, the Royal College of Surgeons came into being, charged by Royal Charter with "the promotion and encouragement of the Study and Practice of the Art and Science of Surgery." The building of the College in Lincoln's Inn Fields was designed to contain John Hunter's museum and a library; the greatly expanded museum and library are still among the principal concerns of the College today.

The original College buildings which were completed in 1813, soon proved inadequate to house the steadily increasing number of specimens which successive Curators, following the Hunterian tradition, were adding to the collection. The building was therefore enlarged in 1835, and again in 1855 and 1891, but the only departments represented were Anatomy and Pathology. In 1931 Sir George Buckston-Browne presented to the College a "Farm" adjoining Darwin's house at Downe in Kent, which consisted of a residence for research workers, farm buildings to house large as well as small animals, and a laboratory suite with an operating theatre. Excellent surgical experimental research was conducted at the Farm under the direction of Sir Arthur Keith, the first Master.

In 1937 a further extension was made to the College itself when, thanks to the generosity of the Bernhard Baron Trustees, another floor was added to the main building to accommodate a research department of Physiology. When war broke out in 1939 the activities of the College, which had been steadily increasing, were brought to a halt, and its treasures, the pictures, much of the library, and the most valuable of the Hunterian specimens were sent away for safe keeping in many parts of England and Wales. On the night of May 10-11, 1941, the College suffered very serious damage in an air raid,

and although the front of the building in Lincoln's Inn Fields was less severely affected all the museums on the Portugal Street side were completely gutted.

When building operations became possible after the war, the Council of the College decided that in order to provide for the expanding activities in the fields of post-graduate education and scientific research it would be useless to rebuild on the previous plan. Though the Hunterian Museum and the Library were still the chief concerns of the Council, accommodation had to be found not only for new museums but also for lecture rooms, demonstration rooms, and research laboratories in the departments of Anatomy, Physiology, Pathology and the newly-formed department of Pharmacology. Furthermore, the Faculty of Dental Surgery and the Faculty of Anaesthetists, both recently established, also required laboratory and office accommodation. These new departments, and the Nuffield College of Surgical Sciences, which is a residence for 80 students, accounts for the enormous building operations now proceeding on the south side of Lincoln's Inn Fields.

Although the scientific departments are not yet properly housed, members of their staffs are already engaged on many problems which have a direct bearing upon clinical surgery. In the Anatomy department the minute structure of nerve cells is being studied using an electron microscope supplied by the British Empire Cancer Campaign. In the Physiology department most interesting work is being done upon the physical and chemical factors which influence the healing of wounds, and valuable electromyographic studies are being carried out on the muscles of mastication in relation to orthodontics. The vasomotor control of the nasal mucosa is being investigated with a view to elucidating allergic reactions in the nose. The Biochemistry sub-department is engaged in research upon lipid metabolism. The workers in the department of Pathology are carrying out research into carcinoma of the lung, and also into disorders of collagen formation, and in the department of Pharmacology important research is being done to study regeneration in the autonomic nervous system, and the effects of ganglion-blocking agents. At the Buckstone-Browne Farm, work of fundamental importance has been done on skin grafting and on organ transplantation, and recently a team of re-

search workers has been making excellent progress with the extra-corporeal circulation.

One of the conditions on which the Hunterian Collection was delivered to the Company of Surgeons provided that "one course of Lectures, not less than twenty-four in number, on Comparative Anatomy and other subjects, illustrated by the preparations, shall be given every year by some Member of the Company." In spite of a promising start, as years went by history repeated itself and the difficulty over finding a suitable lecturer each year again led to the suspension of the lectures. Therefore application was made for permission to alter the conditions, and in 1894 the Lords of the Treasury agreed that each year one course of Lectures not less than twelve in number should be given by Fellows or Members of the College, and since that time applications for Hunterian Professorships have become steadily more numerous so that now there is intense competition for the twelve appointments and an astonishing amount of excellent material is offered by applicants, even by the unsuccessful ones.

There are many other named surgical Lectureships in addition to the Hunterian Professorships, and the College now has an organisation for arranging courses of lectures in surgery for post-graduate students at regular intervals throughout the year.

The College Departments of Anatomy, Physiology, Pathology and Pharmacology, also play their part in University education, as teaching departments in the Institute of Basic Medical Sciences of the British Post-graduate Medical Federation in the University of London. This intimate association with the University enhances the academic status of the departments, and provides some very welcome financial assistance. It will be understood, therefore, that the cost of the educational programme does not fall entirely upon the College and its Fellows.

A function which the College has inherited from the Court of the Barber Surgeons' Company and from Surgeons' Hall is to "test the fitness of persons" to practise Surgery. The Court of Examiners which is elected by the Council is entrusted with the maintenance of the high standard traditionally associated with diplomas granted by the College.

Let me repeat that the College was founded by Royal Charter and is justly proud of being a Royal College. It has been privileged and honoured by a close association with the

Royal Family, and the visit paid by Her Majesty Queen Mary to see the effects of the bombing in 1941 is gratefully remembered. Many members of the Royal Family, including Her Majesty The Queen and Prince Philip, Duke of Edinburgh, have graciously accepted the Honorary Fellowship, and the College was particularly favoured when The Queen

laid the Memorial Stone of the new buildings just before her Coronation.

Finally, it must be realised that since the Royal College of Surgeons attracts post-graduates in large numbers from overseas, it constitutes and will always continue to maintain a vital link between England and the Commonwealth.

AN EARLY STETHOSCOPE

by JOHN R. BROWN and JOHN L. THORNTON

THE PURCHASE of an old stethoscope from the collection of the late Charles Noon, Surgeon to the Norfolk and Norwich Hospital, prompted an investigation into the history of the subject in order to date the instrument. Several early stethoscopes are contained in our Museum, and these have proved useful in fitting our instrument into the chronology of the subject.

René Théophile Hyacinthe Laënnec (1781-1826) invented the stethoscope in 1816, first

struments, materials employed, commercial prices, dates of modifications, priority, and even over which end of the instrument was applied to the chest. However, our present concern is to describe one stethoscope, and to compare it with two instruments of approximately the same period.

The first instrument used in this Hospital, about 1827, by Dr. Bond, afterwards Regius Professor of Physic at Cambridge, was a facsimile of one employed by Laënnec, and was

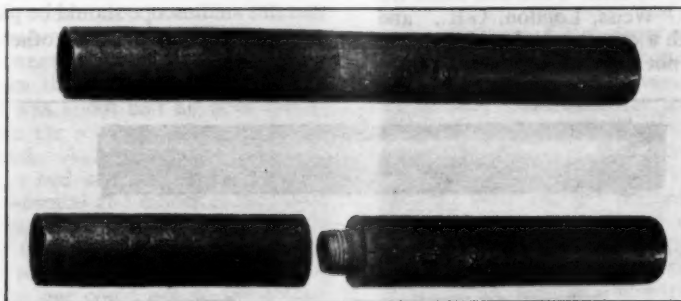


Fig. 1

using a sheet of rolled paper. He then produced a cylinder of either cedar or ebony 13 inches long and $1\frac{1}{2}$ inches in diameter with a central bore $\frac{3}{4}$ inch wide. Laënnec experimented with various substances, and there were innumerable modifications of the stethoscope. Unfortunately the history of the subject is rather obscure, and we hope later to produce a more complete study in an endeavour to clarify the matter. Authorities differ considerably regarding the sizes of in-

presented to the Museum by Sir George Burrows. He stated that he rescued it from being used by the nurses for stirring their washing, after it had been superseded in its original function by more elaborate instruments. This stethoscope (Fig. 1) is $11\frac{1}{2}$ inches long, $1\frac{5}{16}$ inches in diameter, with a $5/16$ inch bore. It is in two sections with a screw joint, and with a deep funnel at one end, $1\frac{1}{4}$ inches deep, probably intended to take a chest piece, now missing. It is made of oak.

A more elaborate instrument (Fig. 2) originally belonged to Patrick Black, who brought it from Paris about 1836. It is made of cedar wood and has a horn chest-piece and ornamentation. This stethoscope measures $12\frac{1}{2}$ inches in length, with a diameter of $1\frac{1}{4}$ inches and a bore of $\frac{3}{8}$ inch. Further information on these and other stethoscopes in the

article was imported for as little as 2 francs. It is in three sections, as illustrated, but one half could be used by plugging the endpiece into that with the cup depression, which is $\frac{5}{8}$ inch in depth, and represents the earpiece.

This instrument dates from not later than 1830, as it is slightly more elaborate than the model first used in this Hospital in 1827, but

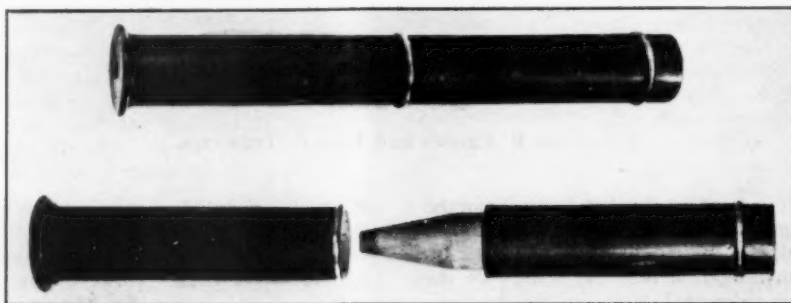


Fig. 2

Museum are contained in an article by T. H. G. Shore in this *Journal* (Vol. 36, 1928-9, pp. 161-163).

The stethoscope (Fig. 3) possessed by one of us (J.R.B.) is of cedar wood and bears the maker's mark "Weiss, London, G.R.," and is stamped with a crown. Unfortunately the makers could not provide any further infor-

was manufactured during the reign of George IV, as evidenced by the fact that it is marked with the crown and the letters "G.R." George IV died in 1830, so that it is most probable that this stethoscope should be placed chronologically between the two other instruments described above.

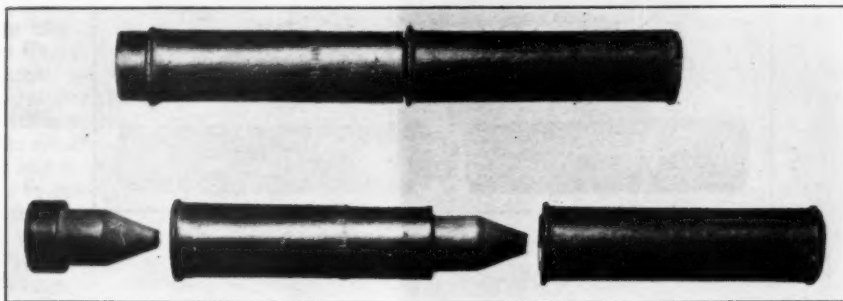


Fig. 3

mation regarding the instrument, which is $12\frac{1}{4}$ inches long, $1\frac{1}{4}$ inches in diameter, with a bore of $\frac{3}{8}$ inch. It is not elaborate, but probably represents an early example of the article commercially produced in this country. Previously they had been imported from France, but possibly the supply could not meet the rising demand, although the French

Acknowledgment

We are indebted to Dr. M. E. Rowbottom of the Wellcome Historical Medical Museum for assistance with our preliminary inquiries, and to Mr. Norman K. Harrison, of our Department of Medical Photography, for the photographs.

SUMMER CLINICAL SCHOOL IN COPENHAGEN

by M. I. D. CAWLEY

FOR THREE WEEKS in August of this year I attended the Summer Clinical School which is held annually at the Copenhagen County Hospital at Gentofte, a suburb of Copenhagen. The course is organised by the International Medical Co-operation Committee who also arrange a Summer Preclinical School at the University of Aarhus. It is conducted in English and is designed to give an impression of the practice and teaching of Medicine in Denmark, and in addition to give one an opportunity to observe social and cultural aspects of Denmark and the Danes. Approximately thirty-five students attended, and many British and Irish medical schools were represented. Women students constituted about one quarter of the party which also included several West Africans and a Dutchman.

On my arrival, just before midnight, I was taken by car to my "digs" by the three Danish medical students who had given up part of their vacation to help us. They put themselves at our service throughout our stay. With some other members of the party, I lived in a very comfortable house in Hellerup, a pleasant residential suburb. This was situated about twenty minutes' walk or a short 'bus ride from the hospital. The centre of Copenhagen was about half an hour distant by 'bus, while the sea was only a few yards down the road. At our lodgings we were provided with bed and breakfast. We had lunch at the hospital and dinner at the "Studerforeningen," the student club in Copenhagen. The food was typically Danish and good, but if one wished to sample the best Danish cuisine one could not do better than visit one of the many restaurants. Prices were variable, but in many cases quite reasonable. Delectable open sandwiches of innumerable interesting variety — the "Smørrebrød" — form the national dish of the Danes.

There was usually a programme organised for us on weekday mornings, beginning with ward rounds at which attendance was not 100 per cent, possibly due to the fact that they started at 9 a.m. These were followed by lectures or demonstrations at 10 a.m. and 11 a.m., many of which were in good English and were usually well attended. The ward rounds were held in general surgical, medical, or pae-

diatric wards. Each of us spent one half of the course attached to a medical and surgical firm respectively. The lectures were on a wide variety of subjects chosen according to the particular interests of the lecturers. The special departments and operating theatres were open to us if we wished to visit them.

Amtssygehus, the Copenhagen County Hospital, was opened in 1927 and has since been added to, both before and after the war. There are about 1,200 beds, most of these being in small wards of three or four beds. The writer understands that this arrangement is fairly general in Scandinavia. The building is relatively modern, as are many Danish hospitals, and is spacious and well equipped. Clinical students from the University of Copenhagen do some of their clinical course there. "Firms" are organised in a similar way to this country, the "Chief" being assisted by a registrar and houseman. Clerks and dressers also have duties corresponding to their English counterparts. On ward rounds the consultants are usually accompanied by a secretary who takes dictated notes of relevant findings and prescribed treatment. At times, however, the students may be required to perform this task. The medical course in Denmark takes at least seven years. The students may possibly cover a more detailed theoretical syllabus in this time, but it should be remembered that they have to go abroad to do a dissection course and in addition most of their textbooks are printed in English or American. There is also a nurses' training school at the hospital. It appeared that the nurses are somewhat less restricted by regulations than their counterparts in this country. One received the impression that laboratory investigations were more extensively resorted to than in England; for example, routine respiratory function tests were performed on nearly all "chest" cases. The laboratory facilities were excellent, a large new laboratory and blood bank having been opened in 1952. Among other interesting features of the clinical laboratory work were the estimation of serum sodium and potassium levels by spectroscopy, a practice which could be carried out quickly and easily, and the routine use of Eldon cards for blood grouping. The Eldon card is a piece of paste-

board about 10cms. x 8cms. in size, the upper half of which is covered with a cellophane film and divided into four separate panels. Each panel contains prepared dry serum reagents, viz., Anti-A, Anti-B, Anti-D (rhesus) and a control respectively, all obtained by allowing a drop of the appropriate serum to dry in each panel. The lower half of the card is for identification and results. A similar card is available for the further identification of Rh.-ve donors, i.e., for the establishment of presence or absence of the C, D and E factors. The blood cells to be tested, in suspension, are mixed with the dried serum on the card. The cards have a storage-life of at least two years at room temperature, and after use can be filed with the patient's notes as a permanent record. It is claimed that, assuming the technique of the test is followed exactly, reliable and accurate blood grouping can be performed at the bedside or in the laboratory in as little as three minutes.*

A number of whole- and half-day excursions were also arranged for us. Dr. Bartels, the Consultant Physician who was largely responsible for organising the course, conducted us round a new hospital building at Glostrup. This was architecturally very modern and designed to be very efficient with regard to equipment and inter-relationship of different departments, but would require a staff of 900 for 800 beds. This seemed extravagant in terms of man-power. The operating theatres were dome-shaped, and designed acoustically so that any words of wisdom uttered at the circumference could be heard with maximum intensity at the centre where the operating table was situated.

We also visited the very new Steno Memorial Hospital and Nordisk Insulin Laboratorium where the protamine-insulin preparations were developed. This is a special unit for research into metabolic diseases with particular interest in diabetes mellitus. There are only just over twenty patients all carefully selected as guinea-pigs. The Copenhagen County Tuberculosis Dispensary and Hospital was also interesting and here the director gave us a survey of modern T.B. therapy and the efficacy of B.C.G. vaccination.

Our whole-day excursions were to Sweden and to North Zealand. We went to Malmö in Southern Sweden, one and a half hours by

boat from Copenhagen, where we visited a most luxuriously equipped modern hospital and laboratory, opened a few months previously. We proceeded to the old University town of Lund and after an over-powering lunch we visited the University and the Cathedral. Our day was completed by a coach trip to places of interest in the surrounding countryside, including inspection of a new students' hostel compared to which even College Hall would appear archaic. Our tour of North Zealand included visits to Frederiksborg Castle with its beautiful chapel and vast art collections, and to Kronborg Castle at Helsingør (Elsinore), traditionally Prince Hamlet's Castle, with its maze of underground passages and dungeons.

Social and welfare services are highly advanced in Denmark and this was illustrated by a visit to the National Guidance Council for Unmarried Mothers. After a talk and discussion, one of the clients showed us over her flatlet in the building. Another afternoon spent at the Tuborg Brewery was reminiscent of Abernethian Society visits to Whitbread's.

The cost of living in Denmark is as high as that in England. There is a minimum bus, tram and train fare of about 6d., which is valid for any journey within the central part of Copenhagen, and there is an all-night tram service.

Copenhagen provides entertainment to suit all tastes and there are numerous shops, cinemas, theatres, museums, historical buildings, parks, and the Tivoli Gardens. There are sandy bathing beaches at Klampenborg and other places on the outskirts of the city. Sailing, on the Baltic, is very popular in the summer. Nyhavn is also worth a visit, preferably with one or more companions, and some establishments there are open all round the clock, whereas much of the rest of the city closes down about 1 a.m. The popular beverages, beer and aquavit (schnapps), can be obtained almost anywhere, although bar prices are not cheap. The Student Club provides informal dances and social evenings with a rather international flavour, in addition to cheap meals, lounges and recreational amenities and newspapers in practically every European language. While we were there the annual conference of the I.F.M.S.A. was also being held, and we joined them for a farewell supper-dance at a hotel in the country. The surrounding countryside was rather flat, but in many places beautiful by virtue of being heavily wooded.

*Further literature on this subject can be obtained from the writer.

We found the Danish people very friendly. The staff and students at the hospital in particular went to a great deal of trouble on our behalf. They gave us a lavish reception at Domus Medica, the headquarters of the Danish Medical Association, on our arrival, and another one at the hospital on our last day.

For anyone who may be interested, £20 covered the course, accommodation, meals, and all organised outings for three weeks. Travelling expenses and spending money obviously depend on one's own tastes and resources, but B.M.S.A. award a limited number of travel grants on application.

A CASUALTY DEPARTMENT

by R.H.

PASSING ONE'S qualifying examinations is an experience remarkably similar to the alcoholic intoxication that is so commonly its sequel. In this rather dream-like state, one tends to perform acts which in the cold light of day seem incredible. It was in one of these moments of lucidity that I found myself two days after qualifying, starting a post as casualty officer and orthopaedic House Surgeon in an area famed for the danger of its roads and the multiplicity of accidents.

My arrival was notable for the affability of the welcome—complete strangers wrung my hand and said, "Wonderful to see you, at last I can have a week-end off"; and so it was that on my first week-end I was precipitated unsuspecting into the casualty department. Reassuring injunctions to call my seniors who only lived about 20 miles away did nothing to dispel my fears. I cannot remember much of the bizarre treatments that were dispensed for the ease of the patients, but I do remember the casualty sister's eyebrows, and when they went above a certain level I would have to think again. (Incidentally, why is it that soon after qualifying, when one is most in need of self-confidence, the medical insurance societies send bulletins concerning the fate of colleagues who seem to have acted with great resource and propriety in very trying circumstances and been sued for their pains?)

The casualty department in the hospital at which I was working occupies a unique position and its many functions are reflected in the differing views of various people.

Ideally the department acts as a filter for many patients presenting themselves—serious cases being admitted for treatment by the appropriate department, mild cases being treated on the spot or sent to their own doctors for further follow up.

Theoretically the casualty officer has skilled advice of every speciality available,

and on the whole the system works well.

The local inhabitants regard it as a place where treatment can be obtained quickly (compared to their G.P.'s surgery) for minor ailments and domestic problems. Works Managers regard it as a way of passing the responsibility for accidents and thousands of bruises are x-rayed annually at the State's expense in order that private firms shall not deplete their capital by claims for compensation.

The general practitioner and the casualty department of the local hospital maintain an uneasy alliance tempered with unspoken mistrust on both sides, but in all fairness one can say that it is the G.P.'s misuse of the casualty department that causes the friction. This is, of course, secondary to the unwholesome system that the N.H.S. imposes on them.

A good general practitioner from the hospital's point of view does not send up cases with which he can deal himself; this depends on facilities and equipment available, but in these days of large group practices a wider range of procedures should be possible. Furthermore, patients very often arrive with a doctor's letter which, even allowing for crowded surgeries, in more gracious days would have been called bad manners. Too often it is "please see and treat." Perhaps this is better than the macabre "kindly dispose of this patient." Perhaps this is not strictly relevant, but good relations between the general practitioner and the consultants of the hospital appear to make for much greater efficiency. A consultant should trust the opinion of the G.P., who should be able to refer patients direct to the former in hospital instead of sending them to casualty.

It is unfortunate that the present system allows bad G.P.'s to empty their surgeries quickly and still draw their salaries; it allows unscrupulous G.P.'s to obtain for their patients quick reference to specialised de-

partments via casualty. Incidentally, one's colleagues in the hospital are convinced that the casualty officer is deliberately attempting to fill their beds with malingerers.

At first I worked on the principle of scattering the patients as widely as possible over the hospital in order that they should not have a chance to grumble among themselves and undermine their morale. Thus they would be sent to the fracture clinic, x-ray department, dressings department, "minor-ops" theatre, and any other nooks that could be found. However, I abandoned this when a member of the hospital committee with a sprained ankle was found some hours later asleep in sister's sitting-room.

One of the fascinations of working in casualty is the complete variability of the complaints that may present themselves, and one soon learns not to judge by appearances—the chap writhing in agony on a stretcher may merely be anxious to have some time from work, whereas the restless drunk may have a broken leg.

The most troublesome problems are the drunks who become involved in fights and may or may not have head injuries. They are rarely co-operative, usually have to be restrained either from sparring with the doctor or making love to the nurses. It is not uncommon for them to want to discharge themselves, which is not really the easy way out one might think.

Other problem patients are the elderly—especially and increasingly—those who live alone, who fall or otherwise incapacitate themselves. Relatives are sent for, often with difficulty, and then a war of wills ensues between the casualty officer who knows that once these old folk are admitted it is a task of Herculean proportions to get them out, and the relatives who see a great chance of shifting their responsibility. It is a contest which if resolved either way, is not the real answer to a problem that is growing more serious. It is often very difficult to explain to people with families of their own that their aged parents, often bed-ridden, incontinent and incoherent, are not the responsibility of the hospital (unless their condition warrants it) even if they are that of the State; itself a doubtful supposition.

Other less tragic problems often present themselves not necessarily of a primarily medical nature. A young wife arrived one

night who had swallowed a bottle of her husband's hair oil in a gallant attempt to prevent him from drowning the litter of the family cat, a ruse which succeeded as far as I could tell while trying to ascertain whether the new secret ingredient to banish dandruff was in actual fact poisonous. There was another young lady with a severe laceration of her ankle, who on discreet questioning revealed that she had put it through the back window of a car while courting with her boy friend. She refused a tactful offer of an arranged visit to the Marriage Guidance Counsellor.

In many ways the present condition of the casualty department in the scheme of things exemplifies the many problems of the present Health Service. Many patients now regard the hospital as first port of call when they are in trouble, and often when asked why they do not consult their own doctor, say with some justification "Well, I knew that my doctor would send me here, so I thought I would save time." All this tends to make relations between hospital and practitioner strained. Some of the resident hospital staff regard the G.P. with patronage if not worse. This is naturally resented by a G.P., especially when he has done his best for a case and has to decide finally that hospital treatment is necessary. He rings up the hospital and is subjected to a cross-examination by someone young enough to be his son and qualified only a few months into the bargain. This problem has been advertised widely enough, but no ready solution seems available. The underlying factor may be that at the moment the Health Service does not encourage the G.P. to look after his patient; quite the reverse, in fact, for the more patients he has on his list the higher his salary but the less time to treat them. The result is that they crowd the casualty and out-patients' departments of the hospital, causing many headaches in administration and staffing.

These views are based on the slenderest of experience and may not reflect a true picture. Many other problems must be involved.

From a personal point of view, however, casualty work is an absorbing way of learning about patients, general practice and its problems, and the practical result of the Health Service—a fact that might not be readily appreciated while trying to pacify a drunk, suture his scalp and maintain asepsis all at 2 o'clock in the morning.

SPORTS NEWS

VIEWPOINT

Three of the winter sports clubs, the Rugby, Hockey and Association football clubs, have completed their various tours to Cornwall and Cambridge. Activities are now centred on building up sides for the Cup matches, of which the first is the Hockey match against St. Thomas' Hospital. The Rugby Club appear satisfactorily to have filled the gaps left by the departure of some of last year's team, and their record to date, although not unduly impressive, compares very favourably with that of other London hospitals. It is to be hoped that the injuries at present affecting them will have mended sufficiently to enable them to field a fully representative side in January. The dates of the Hospital Cup have once again been put well forward so that adverse weather conditions might be less likely met.

RUGGER

1st XV v. Rugby (Away). Won 14-9.

The 1st XV did well to beat a strong Rugby side by fourteen points to nine at Chislehurst, particularly when the services of R. M. Phillips and J. C. Mackenzie were not to be had. However, newcomer Bamford from Cambridge was making his first appearance in the three-quarter line, and he did much to infuse ideas into our rather defensive backs.

The Hospital kicked off with the wind behind them and for the first fifteen minutes kept up continuous pressure in the Rugby twenty-five. Shortly afterwards, Bart's took the lead with the first of two well-kicked penalty goals by Stevens, the second following ten minutes later. Although the Rugby pack were heavier man for man than the Hospital pack, it was a very even duel forward with Bart's packing low and tight in the set scrums and being quick to get their foot over in the loose mauls. Bamford had been prominent with several astute diagonal kicks which the Rugby full-back had been fortunate to field on the bounce, and at half-time the sides crossed over with Bart's still leading by 6 points to nil.

Shortly after the interval, Rugby reduced the arrears and finally equalised with two fine penalties by their scrum half. With the pace of the game becoming faster, Bart's took the lead again with a magnificent 50-yard penalty goal by Pennington. However, their lead was short-lived as Rugby scored an excellent unconverted try by getting a quick heel after a move had broken down fifteen yards from the Bart's line and their centre crossing over half-way out.

However, Bart's were not finished yet and, responding to the fiery leadership of Laurie Thomas, came back with a similar try after a move in which Bamford, Dobson and Moynagh had handled before it broke down 10 yards from the Rugby line. With a lightning heel from the ensuing loose maul, Bart's found an opening and, in a flash, Bamford crossed half-way out for Stevens to kick his third goal of the afternoon and to give Bart's their first win against Rugby for over five years and also their fourth win out of six matches so far this season.

It is hoped that the 1st XV will be lucky down in Cornwall, where they go early in November, as their brand of rugby is based on a reasonably dry ball and pitch, and it is a long time since they have gone down to Cornwall, having lost only one match, and that to the Cambridge University LX Club 3-0.

It was again most satisfactory to see that the four Hospital sides were again unbeaten, as it shows that at long last the training and coaching of previous years and especially this year are bringing better players to the Hospital and, consequently, better results.

Team: M. Britz; A. B. M. McMaster, J. Stevens, J. Bamford, J. C. D. Plant; R. R. Davies, B. Richards; J. L. C. Dobson, J. W. Hamilton, B. Lofts; L. R. Thomas (capt.), J. Pennington; P. D. Moynagh, W. P. Boladz, M. Whitehouse.

CORNISH TOUR

With not ill-founded hopes, the 1st XV looked forward to a successful Cornish tour this year, but they reckoned without the tolls of injuries and also the weather. Thus the former prevented Phillips, Mackenzie, Whitehouse and Pennington from taking any active part in the tour, and the vile weather at Penzance spoilt any ideas Bart's might have had about open rugby.

The morning of the Penzance and Newlyn match was bright and sunny, but as seems customary, about two hours before the kick-off, heavy rain fell up till half-time to turn the pitch into a sea of mud and water, and open rugby out of the question. With Penzance fielding four of this year's Cornish side and several more from last year's county side together for the first time this season, Bart's kicked off with the rain and wind behind them. The forwards soon settled down and with some excellent hooking by Hamilton gave the backs a fair share of the ball and, but for poor finishing, must have scored on more than one occasion. However, there was no scoring before half-time as the play rarely left the area between the two twenty-fives. Play continued to be rather scrappy after the interval, although Britz at full-back was giving a classic exhibition in fielding and kicking an extremely wet and greasy ball. It seemed as if Bart's were resigning themselves to a draw when suddenly, ten minutes from the close, the Penzance scrum-half dropped a brilliant, if fortuitous, left-footed goal from 35 yards out. This was followed almost immediately

by a try when one of the Penzance second row crashed over from a line out, and which he then converted. Minutes later the home side just failed to add to their score when a shot at a penalty hit the upright, and so the game finished with Penzance winners by eight points to nil.

Bart's lost this match because they failed to adapt themselves to the kick and rush tactics required for such conditions and because their backs were invariably tackled on receiving the ball.

No account of our stay in Penzance would be complete without a word about the excellent hospitality shown us by the Penzance and Newlyn President, Mrs. Lawrie, and her fellow officials. Every year we go down to Cornwall and always have a most memorable and enjoyable stay in Penzance.

Team: M. Britz; G. J. Halls, J. Stevens, J. Bamford, A. B. M. McMaster; R. R. Davies, B. Richards; J. L. C. Dobson, J. Hamilton, B. Lofts; L. R. Thomas (capt.), C. C. H. Dale; R. P. Davies, W. P. Boladz, P. D. Moynagh.

On the following Monday our opponents were Devonport Services who, when at full strength, had lost only to Harlequins and Redruth this season. Their back division included Waddell, the international fly-half, and two centre three-quarters who have appeared for Devon and Yorkshire respectively. As if this was not enough, both their wing-forwards had had international trials, Bart's made three team and two positional changes, bringing in Charlton, B. O. Thomas and Neely in place of Richards, Lofts and Moynagh, moving Halls to wing-forward and Stevens on to the wing.

Within five minutes of the start, the Services were five points up when Waddell created a perfect opening, and for the same player to touch down near the posts. This early shock woke up the Bart's pack, who then proceeded to give the Services eight a rough time in the set scrums and line-outs. It was in the latter that Laurie Thomas performed exceptional feats of jumping, ensuring a reasonable supply of the ball for our backs. Hamilton gave another display of quick striking in the set scrums and, in the loose, the Hospital pack gave one of their fiercest and most vigorous displays seen this season. However, the Services backs were not easily contained, and it was from a three-quarter move started from behind their own line that Waddell scored to give the Services an eight-point lead at half-time.

Shortly after the interval, Waddell scored his third try of the afternoon, which was converted, and the Services' lead was further increased when they kicked a fine 35-yard penalty. It was noticeable at this stage that our backs, although tackling well, could rarely penetrate a tight Services defence, although Rees Davies and Charlton often initiated dangerous looking moves for them to be broken up by resolute tackling.

In conclusion, the main lessons learnt from the tour must surely be that we must have more penetration midfield if we are to hold our own against first-class sides, and that the pack as a whole must cover much more in defence. However, it was most pleasing to see a robust and enthusiastic Bart's pack at this stage of the season, and it is to be hoped that they will not reserve such performances for Cup matches only.

SAILING

Colours have been awarded to the following gentlemen: Michael Bunnemeyer, Colin Burt, David Welch.

FIVES

The newly-formed Fives Club won its first match of the season on Saturday, October 5th, when they beat the Clove Club, in a close game, by 2 points.

A strong Bart's first pair beat both Clove Club pairs easily. The second pair lost both games, but managed to obtain enough points to produce an exciting finish, when the Clove Club needed only 6 points in the final game to win. They only, however, managed to get 3, thus losing the match by 2 points.

Scores:—

Bart's 1st v. Clove 1st—Won	15—4, 15—4
Bart's 2nd v. Clove 1st—Lost	2—15, 5—15
Bart's 2nd v. Clove 1st—Lost	7—15, 5—15
Bart's 1st v. Clove 2nd—Won	15—6, 15—3

Total: 79—77

The Fives Club has a fixture list of about 6 matches so far this season. Any players who wish to try for the team should contact the Secretary, M. T. Haslam.

SQUASH

That the Club lacks first-class skill was evident from the trial which produced several keen players but none of outstanding ability.

The first team began the season with a convincing victory over Old Paulines which was followed by a very close defeat at the hands of the Westminster Hospital on their court, which, on the evening, fulfilled amply its reputation for tropical temperatures.

The new fixture with the Jesters proved very enjoyable and instructive despite the fact that we lost 0—5. There was much to learn from this, in most cases, all too short glimpse of really first-class squash.

The second team, under the captaincy of J. Sugden, is again strong, and has had two commendable victories over U.C.H. and the Trade Indemnity Company.

SOCCER

Bart's v. Westminster Sports Club (Home). October 19. Won 2—0.

Bart's returned from their Cambridge tour fitter and more accustomed to playing with each other. For the season's first match at Chislehurst, three new pre-clinical players were brought into the side—P. Savage and J. Kuur at the wings, and M. Williams at left half-back.

The pitch was in perfect condition, fully supporting the claim of those who say that Chislehurst is one of the finest grounds in the London area. Indeed, all was ready for a fine game, and

so this turned out to be. The play was fast and open, and it was surprising that there was no score at half-time. Bart's had struck a post, and hit the cross-bar, and would surely have had a comfortable lead but for an acrobatic performance from the Westminster Club goalkeeper.

Bart's were encouraged by words of advice from their coach at the interval and, in due course, the goals came, both scored by Gould. He has been the Hospital's leading goal-scorer for several seasons now, and once again he is sweeping aside his years, and examination worries, to show his colleagues how to score the goals. One came from a well-placed left-foot ground shot, and the other from a header when he had slipped his opposing centre-half to be unmarked in the middle.

Andan and Savage were a dangerous right wing and much of Bart's attacking came from this flank.

When the final whistle sounded, Bart's were still attacking, and the cat-like Westminster goalkeeper was still leaping and clawing at the near-impossible with amazing versatility.

Team: J. D. Mercer; R. C. Kennedy, D. I. Prosser; P. Watkinson, C. P. Juniper, M. Williams; P. Savage, A. Andan, A. M. Gould, R. Pilkington, J. B. G. Kuur.

League Match v. St. Mary's Hospital (Away). October 23. Lost 1-6.

Bart's scored straight from the kick-off, Andan and Savage took the ball down the right wing and rolled it into the Mary's goal mouth. Gould was in close attendance, and with the Mary's defence in panic, the ball found itself in the back of their net. Scorer? An "own-goal"!

For the rest of the first half the game swung from end to end. Mary's scored twice, and Bart's went very close on several occasions. Andan and Savage inter-passed with accuracy and switched positions in bewildering fashion. Gould was roaming in midfield, and Mary's defence was having a busy time. The Bart's rearguard looked solid enough, and there were hopes that the half-time deficit of 1-2 would be wiped out.

But the final twenty minutes of the game were disastrous. Mary's scored four times, mainly from long range pot-shots which found the target. The final score does not reflect the closeness of the match.

Team: D. Kingsley; R. C. Kennedy, D. I. Prosser; R. G. L. Smith, C. P. Juniper, M. Williams; P. Savage, A. Andan, A. M. Gould, R. Pilkington, M. Noble.

Bart's v. Caledonians (Home). October 26 Won 2-1.

Pilkington does not often score goals. He makes openings for others and only rarely does he feature among the list of scorers. Today, however, was the exception. The score stood at one goal each, and Pilkington set out on a corkscrew dribble from deep in his own half. With the ball at his boot laces he weaved his way into the Caledonian penalty area and flashed a drive into the roof of the net, which even Trautmann would not have seen.

Our Scottish visitors are always welcome at Chislehurst. They play a good sporting game and

even applaud us for our good moves. They all carry genuine Scottish names, and the spectator cannot fail to be amused when they call to each other for the ball. They began well with a goal in the swirling wind after five minutes, but Bart's struck back, and Juniper levelled the scores direct from a corner-kick. Juniper does not have the chance to score many goals, because as centre-half his height and strength bar the way to rival forwards. But the introduction of G. Haig, a centre-half who has just started at Charterhouse, enabled Juniper to move to wing half-back, and to go upfield in support of his forwards. Haig played very well, as also did Williams and Marsh. Bart's attacked strongly but, after Pilkington's goal, did not score again. The Caledonians broke out of defence from time to time, and on one occasion swung across a centre on to the top of Bart's cross-bar. This was the nearest they came to gaining a draw, and Bart's were worthy winners.

Team: J. D. Mercer; R. C. Kennedy, D. I. Prosser; C. P. Juniper, G. Haig, M. Williams; P. Savage, A. Andan, B. T. Marsh, R. Pilkington, D. Kingsley.

Bart's v. Normandy Company, Sandhurst (Home). October 30. Won 3-2.

It is a pleasure to welcome Dr. Wills back to Bart's football. His sureness and strong tackling in defence were very apparent. T. Phaure at right-half, I. Carnochan at left-half, and J. G. Stuart on the right wing all joined the team for the first time in a match at Chislehurst, and each played his part well. P. Watkinson moved to centre-forward and marshalled his line to good effect.

Normandy Company opened the scoring after five minutes with a good goal by their centre-forward, following an attack on the right wing. Bart's were slow in mastering the heavy ground conditions and greasy ball. A second-half hat-trick by left-winger Iregbulem won the match, although the visitors pressed strongly in the final ten minutes and reduced their deficit to 2-3. The Bart's defence withstood further attacks and victory was well deserved.

Team: D. Kingsley; Dr. E. D. Wills, D. I. Prosser; T. A. J. Phaure, G. Haig, I. Carnochan; J. G. Stuart, M. Williams, P. Watkinson, T. O. Johnson, L. Iregbulem.

Bart's v. Trinity Hall, Cambridge (Home). November 9. Won 6-0.

Trinity Hall sacrificed the grandeur of Poppy Day in Cambridge to come to Chislehurst and meet Bart's at soccer. They found the Hospital side in a lively mood, and the battering they took must have made them wonder whether they would have had a quieter afternoon back in Cambridge.

The whole of the Bart's team played better than at any time previously this season. Mercer in goal made two good saves, and Kennedy at right back was outstanding. The experiment of playing Noble at left back with Prosser moving to half-back was a success, and completely shut out the Trinity Hall right flank. Haig played strongly at centre-half and Watkinson at right-half found time to go up into attack with his forwards, in effect making a

six-man forward line.

Gould (3), Iregbulem (2) and Kuur scored the goals. Kuur and Andan on the wings were very aggressive and fast, never giving the visitors' defence time to recover. Johnson at inside-right supplied good passes to his forwards and frequently came back to help the defence when danger threatened.

The team has improved rapidly in the last month and hopes are high for a good run in the cup. The number of good reserves available makes team selection a difficult matter. Indeed, the whole situation has changed abruptly from recent years, when it was a matter of some difficulty even to raise a team, and injury or illness of one or two players was a major disaster. Better days have arrived.

Since the issue of last month's magazine, the Students' Union have approved the award of Honours to A. Whitworth, captain of St. Bart's A.F.C. last year, and ex-Cambridge blue.

WOMEN'S HOCKEY

The Women's Hockey Club began the season with the team trials on October 5th, 1957, at Chislehurst. The players attending the trials included several newcomers whom we were very pleased to welcome. On October 12th a number of members attended the United Hospitals trials. The following were selected to play for the U.H. team: I. Tomkins, J. Tuft, J. Hartley, J. Chambers (capt.), J. Swallow.

Due to two cancellations the first match of the season did not take place until October 19th when we played Royal Free Hospital in the 1st round of the University of London Inter-Collegiate knock-out tournament. This match resulted in a

win for Royal Free by 2-1. During this match we realised that teamwork was lacking, especially among the forward line.

On October 26th we played King's College and lost 3-2. This was a very good game, and the standard of play showed signs of definite improvement, especially in the second half, when the forward line began to work together.

CAMBRIDGE TOUR

This year the annual tour was spent in Cambridge over the week-end November 8-11th, during which four matches had been arranged. The first match was against a team selected from Magdalene Rugby XV which resulted in a 2-2 draw. This game was enjoyed by all and did not depend on brute force versus skill. Goals were scored by Elizabeth Knight and Jennifer Hartley. The defence rose gallantly to the occasion, with both backs clearing the ball hard and well. On Saturday we were to have played Homerton but this match was cancelled due to the counter attractions of Poppy Day. On Sunday we were dismayed to find that we were to play Queen's College 1st XI, the same team that our men had played the week before. However, we had a very good match and managed to hold the score down to 5-0 for Queen's, who were very good sports and excellent hosts for the rest of the tour. On Monday a very tired and weary team were outclassed by Cambridge University Women's XI and lost 7-0. We hope that we shall have gained experience by playing against such a team. The teams have been chosen from the following ladies:—

Isobel Tomkins, Jill Tuft, Gillian Barraclough, Jennifer Hall, Barbara Barnard, Jennifer Angell-James, Marne Robertson, Valerie Nash, Jean Arnold, Lorna McPhail, Jennifer Hartley (capt.), Sheila James, Elizabeth Knight, Janice Swallow.

BOOK REVIEWS

MEDICINE FOR NURSES by W. Gordon Sears.
VIIth Edition. Edward Arnold Ltd. 18s.

Perhaps the first point that has occurred to reviewers of Dr. Gordon Sears' book in all its editions has been that it is exceedingly good value for money. No other medical text book for nurses can rival it in the amount of information provided at the price.

The second point has been that former editions could not be unhesitatingly recommended as a guide to student nurses because of the author's conservative attitude to obsolescent methods. This edition, however, has been thoroughly revised and brought up to date from Chapter 1 onwards. It is as full as ever of facts clearly stated and well tabulated, and this has always been one of its main attractions for nurses. There are also sections relating to general subjects, such as those on causes of unconsciousness and of sudden death.

The criticism that can be made of this book is that proprietary names are very freely used for drugs, and that the nursing techniques mentioned are less modern than the medicine. For instance, the nurse is not likely to be asked to apply a belladonna plaster for cardiac pain, or to give a

turpentine enema to a patient with typhoid fever. There is also the fact (very curious to nurses) that doctors can describe a disease without mentioning its owner. The section on peptic ulcer gives no clue to the age, sex or temperament of the sufferer. However, so much is given to us in this textbook that it is perhaps ungracious to ask for more.

W. E. HECTOR.

HOW TO USE A MEDICAL LIBRARY: a guide for practitioners, research workers and students by Leslie T. Morton. London, Heinemann Medical Books, 1957. Pp. vii, 53. 7s. 6d.

Every person who makes use of a medical library should read this book. It may be suggested that it is the duty of librarians to provide information for readers and to find the books they require, but unfortunately it takes many years to train a medical librarian, and some readers must be served by those in training. Readers who make themselves acquainted with the layout of a library, the manner in which the books are arranged, and to appreciate the various bibliographical tools, etc., can enhance the value to themselves of any collection of books.

It is sometimes suggested that librarians spoon-feed medical men by providing all the material, as it were, on a plate, complete with bibliographies, abstracts, translations, chronologies, illustrations, etc., checking proofs, and (be it whispered) even writing papers for them. Much of this work must be done by librarians for busy consultants, but the student and intending research worker should learn how to search the literature of subjects in which he is interested. Accomplished methodically, this is an education in itself, and would result in better written books and papers, with appended bibliographies of impeccable references.

Mr. L. T. Morton, Information Officer to the *British Medical Journal*, has prepared an invaluable guide to medical libraries and literature in a concise yet comprehensive booklet that offers guidance in the use of the catalogue, the various schemes of classification, medical bibliographies, periodicals, abstracting services, etc., and provides a list of the principal medical libraries in Britain. This may appear frightening to the uninitiated, as does any large collection of books ranged in their thousands around the walls of a room. It is the duty of librarians to make available the information contained in those volumes, making full use of the necessary indexes and abstracts. But readers will be surprised how much they can help themselves by becoming acquainted with these tools. They can select material as they progress through the literature, following likely clues and rejecting false leads as can only the person who knows what he really wants. And how many readers tell librarians exactly what they require?

Medicine is comparatively rich in bibliographical tools, and this small book is an authoritative guide to the intricacies of the vast medical literature already extant, and pouring forth in an ever-increasing torrent. It will repay careful study by all venturing into print, or using medical libraries for any purpose whatsoever.

JOHN L. THORNTON.

ESSENTIALS OF CHEMICAL PATHOLOGY by D. N. Baron. Foreword by Sir Charles Dodds. London: The English Universities Press Ltd., (1957), 247pp., 25s.

This is a book which has been primarily written for students. It is not a bench book dealing with details of laboratory technique, though there is one appendix giving "normal values" of blood, urine and stool examinations and the quantities of blood, etc., required by the laboratory for testing, and another appendix which briefly summarises the procedures for the routine ward tests of urine and faeces. The book provides in fact, what its title promises: the essentials of chemical pathology. Of some 200 pages of actual text the first half deals with general chemical pathology—water and electrolytes, acidosis and alkalosis, carbohydrates, proteins, lipids. The second part is devoted to specific systems—endocrine glands, bones, liver, kidney, alimentary tract, central-nervous system. For these 200 pages there is an index with well over 2,000 references and cross-references. This makes the book particularly valuable for quickly obtaining information about a special problem and extends its scope beyond the use by undergraduates to that by housemen and registrars on the ward or by doctors in general practice. The emphasis, however, is on the teaching of students,

Trouble in the Hypothalamus

by PODALIRIUS

"Oh, dear, I feel so sleepy," said the hypothalamic cell. "It must be all this pyruvate. What's it doing here?"

"No wonder you're sleepy," said his friend the leucocyte, who had come to have a chat. "Everyone feels the same—you're just unduly sensitive. And it's not only pyruvate, it's pyruvic aldehyde too—and that's even worse."

"Yes, I know, I know," said the hypothalamic cell, who was inclined to be a little testy. "What I want someone to tell me is, what's it doing here?"

"Well, you see," said the leucocyte, "it all starts with glycogen, and then that turns into glucose, which turns into glucose-1-phosphate, which—"

"Yes, yes, I know, I know," said the hypothalamic cell again—rather rudely, for the poor leucocyte was doing his best. "Then it goes through the whole ragamadolio to pyruvate, but after that the pyruvate disappears. Or should do. Why doesn't it?"

The leucocyte was very patient, though he realised that these highly specialised cells over-rated their own intelligence and importance. "It's usually oxidised; but that needs co-carboxylase."

"Well?" The hypothalamic cell was really very drowsy.

"Don't you see (you silly old neurone) that thiamine is needed for co-carboxylase; and the boss just hasn't been taking enough? Since he had that operation, his appetite hasn't picked up." But by now the hypothalamic cell was snoring.

"Oh dear," said the leucocyte, "now he's asleep, the boss's appetite will get worse than ever."

"Oh, what a wonderful morning!" carolled the hypothalamic cell. "I feel I could beat up a Beta cell! But why do I feel so good?"

"It's because the pyruvate's gone," said the leucocyte.

"Gone? Where to?"

"Oxidised! Somebody told the boss to start taking Bemax, and now he's fine."

"Bemax? What's that?"

Really, these neurones! And they think they know so much.

"Bemax," said the leucocyte, "is stabilized wheat-germ. It contains lots of thiamine, and that's how all the pyruvate got oxidised. And it contains all the other important B vitamins. It's the richest natural vitamin-protein-mineral supplement. The boss just sprinkles it on his food."

"Jolly good. I hope he keeps it up."

"So do I."

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and there is one appendix with selected examination questions on chemical pathology.

It is a pity that in a work costing 25s. the borderline of "essentials" has been drawn so narrowly as to exclude iron metabolism and haemoglobin. A few misprints can be discovered—none of them seriously misleading. On page 133, for instance, "alkaline phosphate" should have been "alkaline phosphatase." Although a list of titles of seven major text books is provided, the lack of references as a guide to further reading is a distinct disadvantage.

There are naturally some points of detail where not everyone would agree with the author. For example, it is said that the level of plasma-pseudocholinesterase is affected by extrahepatic factors, and that this is one of the reasons for not using it as a liver function test. Yet the same argument—equally applicable, if not more so—is not made against using as liver function tests the measurement of plasma transaminases or of bromsulphthalein retention. It is not mentioned that the latter test can give rise to allergic reaction, and is not always without danger. Is calcium really absorbed principally in the upper small intestine "where the medium is slightly acid"? This would restrict the area of absorption to a very small part of these intestines. There is, in fact, no reason to believe that alkaline pH prevents the absorption of calcium salts, as long as amino-acids or citrates are present. Amino-acids in particular combine with the sparingly soluble salts of divalent cations to form complexes which are soluble at alkaline pH.

Much of chemical pathology has been incorporated into undergraduate teaching only within the last twenty years. The author is a young chemical pathologist and, unlike most present-day writers of text books on that subject, he himself must have met as a student much of the matter he now teaches. This may in part be responsible for the excellent arrangement and the clarity of the various chapters. They show a real insight into the difficulties the medical student has to overcome and they link up with what he has learned in his pre-clinical days and what he now sees and hears at the bedside. The students of Dr. Baron must indeed be fortunate to be taught chemical pathology in such a way. This book will now enable undergraduates elsewhere to share their advantage.

H. LEHMANN.

BOOKS RECEIVED

Inclusion in this column does not preclude review at a later date.

GYNAECOLOGY: A HANDBOOK FOR NURSES by Gladys H. Dodd. Faber & Faber, London. Pp. 178. 18/-.

INTRODUCTION TO MEDICAL LABORATORY TECHNOLOGY by F. J. Baker, R. E. Silverton, Eveline D. Luckcock. Butterworth & Co., London. Pp. 408. 35/-.

AIDS TO MATERIA MEDICA FOR NURSES by Amy E. A. Squibbs, Baillière, Tindall & Cox, Ltd. Pp. xvi + 246.

PATIENTS AS PEOPLE by A. E. Clark-Kennedy, Faber & Faber, London. Pp. 251. 15/-.

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by H. W. Scott-Wilson, B.Sc., B.M., B.Ch.
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by P. McG. Moffatt, M.D., M.R.C.P., F.R.C.S.,
D.O.M.S.
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OSTEOLOGY

by Nils L. Eckhoff, M.S., F.R.C.S., and J. Joseph,
M.D., M.R.C.O.G.
Sixth Edition. Price 10s. 6d. Postage 1s.

PATHOLOGY

by J. O. Oliver, M.B., B.S.
Eleventh Edition. Price 10s. 6d. Postage 1s.

PUBLIC HEALTH

by Llywelyn Roberts, M.D. (Hygiene), M.R.C.P.,
D.P.H.
Eighth Edition. Price 10s. 6d. Postage 1s.

ZOOLOGY

by H. Lister, M.Sc., and R. E. Lister, B.Sc.,
M.I. Biol.
Fifth Edition. Price 8s. 6d. Postage 9d.

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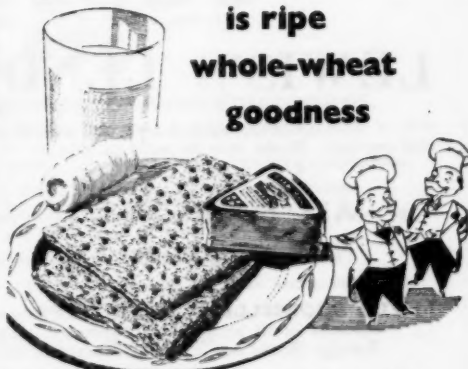
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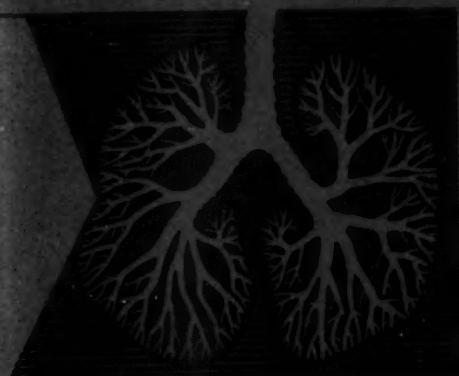
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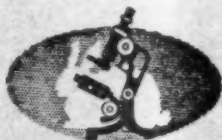


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